

University of Dundee

A cost effective hydrogel test kit for pre and post blast trinitrotoluene

Choodum, Aree; Malathong, Khanitta; NicDaeid, Niamh; Limsakul, Wadcharawadee;
Wongniramaikul, Worawit

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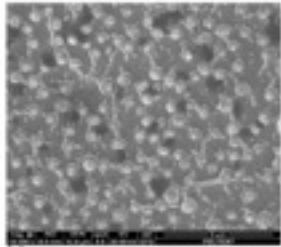
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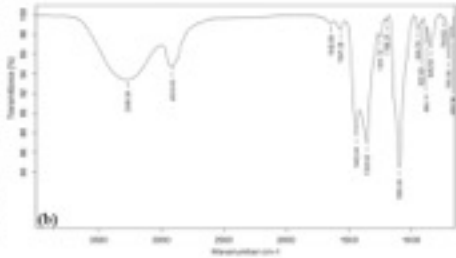
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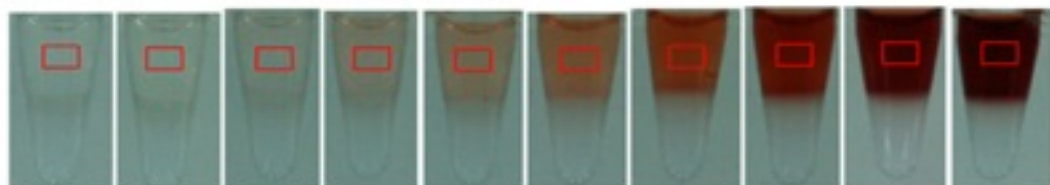
(a)



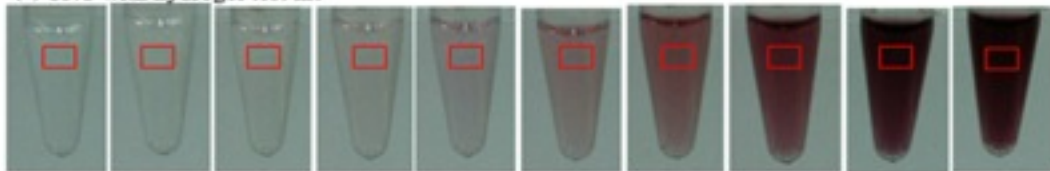
(b)



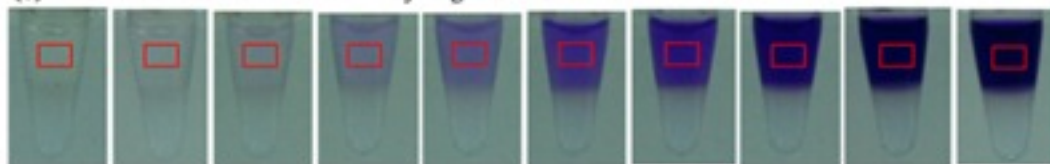
(a) Chemical reaction of TNT and KOH solution [15, 16]



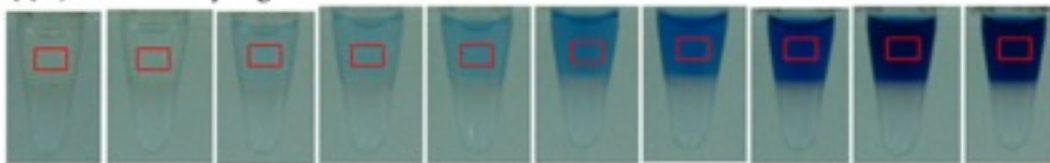
(b) TNT with hydrogel test kit



(c) TNT with KOH solution without hydrogel matrix

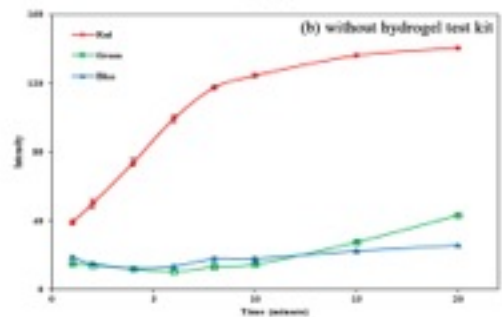
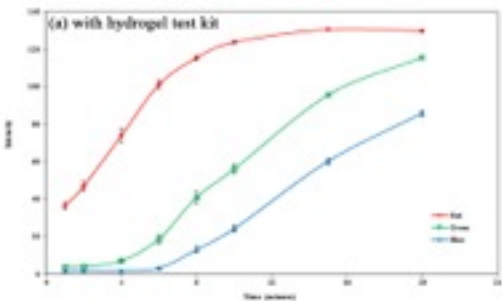


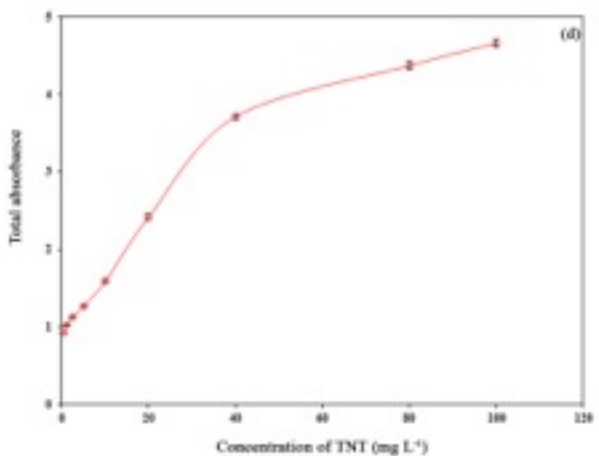
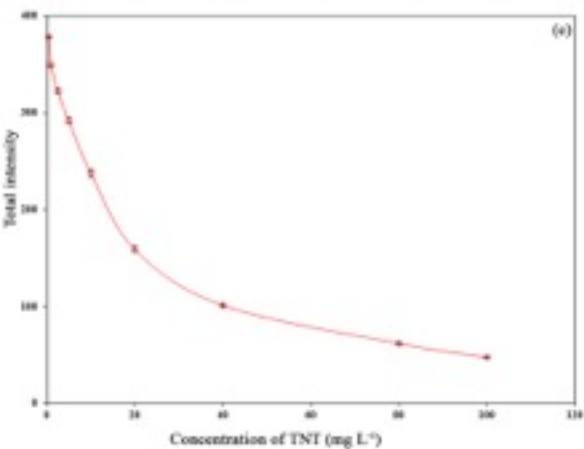
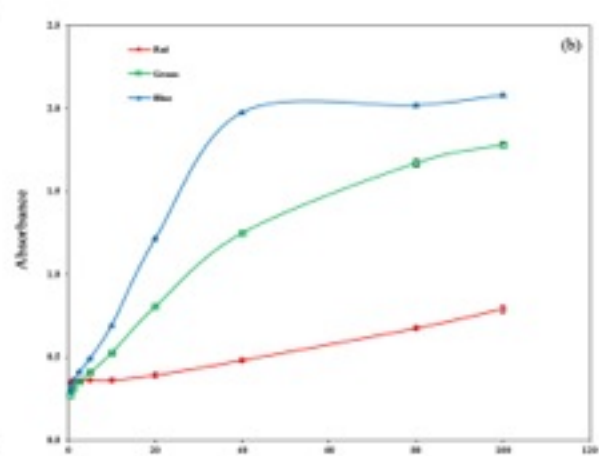
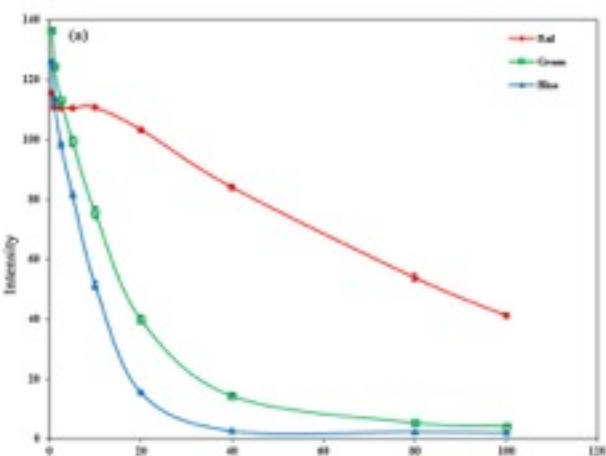
(d) 1,3-DNB with hydrogel test kit



(e) 2,4-DNT with hydrogel test kit

Blank 0.5 1.0 2.5 5.0 10 20 40 80 100 (mg/L)





% Homolog

